



## AMENDMENTS TO THE CLAIMS

1. (Currently amended) A ~~virtual router distributed on a carrier network~~ fulfilling a distributed virtual routing function, said carrier network comprising one or more components, each of the components comprising at least two nodes communicating with one another by means of an artery, ~~[[a]]~~ each node comprising ~~[[a FAX]]~~ an access function and server functions (LES/BUS, LECS, MPS), wherein at least one component of said network comprises the following elements:

- several ELANi-bridges, each ELANi-bridge being connected to a virtual network VLANi,
- at least one transit ELAN, ~~[[Tx]]~~ all access functions of the same component being adjacent through said transit ELAN, and
- at the level of an access function ~~[[FAX]]~~:
  - LEC router LEC means ~~[[Rix]]~~ adapted to ~~connecting~~ connect the access function ~~[[FAX]]~~ to at least one ELANi associated with a VLANi,
  - means ~~[[Lx]]~~ for the identification of the VLANis serviced by the access function ~~[[FAX]]~~,
  - means ~~(transit LEC transit)~~ to connect the transit ELAN to the access function.

2. (Currently amended) A distributed router according to The carrier network of claim 1, wherein the step of determining the lists of the serviced VLANi is obtained by considering any one of the Lm lists and determining the contents of its intersection with any other of the lists to obtain the empty set identification means is a list, wherein for a component of the network comprising m nodes, said list is one of m lists, said m lists defined so that the intersection of any two of the lists provides an empty set.

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3. (Currently amended) A router according to claim 2, wherein a list Lm is drawn up by using an election protocol such as the VRRP protocol standardized at the IETF. The carrier network of claim 1, wherein said access function comprises an election function, said election function interfacing with corresponding election functions of other nodes by exchange of packets on the ELANi-bridges using the router LEC means.

4. (Currently amended) A router according to one of the claims 2 or 3, comprising an election function implanted in the access function FAX engaged in dialog with the homologous functions by exchange on the ELANi bridges in using the LEC routers Rix. The carrier network of claim 3, wherein said election function ensures implementation of an election protocol.

5. (Currently amended) ~~A router according to one of the above claims~~ The carrier network of claim 1, wherein a VLAN comprises at least one [[«]] LEC user [[»]] connected to a node of the carrier network.

6. (Currently amended) ~~A router according to the above claims~~ The carrier network of claim 5, wherein the [[«]] LEC user [[»]] function is implanted in a node of the carrier network for ethernet type access operations.

7. (Currently amended) ~~A router according to one of the claims 1 to 6, distributed in~~ The carrier network of claim 1, wherein the carrier network is an ATM type carrier network[[s]] with IP type data packets.

8. (Currently amended) A method of routing in a switched network comprising one or more components, the component or components comprising at least two nodes connected by a communications artery, each of the nodes comprising an access function [[Fax]], wherein the

method comprises ~~at least one step where the access function relays the~~ relaying data packets received on one of the LECs using the access function as follows:

(a) if the addressee of ~~[[the]]~~ a packet is an internal routing function laid out at a node X, the packet is directly handed over to said function,

(b) if the addressee of a packet is a VLAN serviced by the ~~[[Fax]]~~ access function, the data packet is relayed to the router ~~having the same identifier~~ LEC of the node X corresponding to the VLAN serviced,

(c) if the addressee of ~~[[the]]~~ a packet is a VLAN that is not serviced, the packet is relayed ~~[[to]]~~ on the transit ELAN via a transit LEC of a node X to a transit LEC of a node Y.

9. (Currently amended) ~~A routing~~ The method according to the above of claim 8, wherein said access function comprises a list of identifying VLANs serviced, a routing table, and a relaying function, and

wherein the step (b) is carried out as follows:

- if the addressee VLAN ~~with the identifier j~~ belongs to the list ~~[[Lx]]~~, the relaying function of ~~[[Fax]]~~ the access function is activated and the data packet is relayed to the ~~[[LEC]]~~ router LEC ~~[[Rjx]]~~ having an identifier that is the identifier of the addressee VLAN, and

wherein the step (c) is carried out as follows:

- if the addressee VLAN does not belong to the list ~~[[Lx]]~~, the data packet is relayed to the transit LEC of a node Y as mentioned in the routing table.

10. (Currently amended) ~~A routing~~ The method according to one of the claims 8 and 9, wherein the relaying step is performed for a data packet received on the router LEC implanted in an access function.

11. (Currently amended) ~~[[A]] The method according to one of the claims 8 and 9 of claim 8 or 9~~, wherein the relaying step is achieved for a data packet received on the transit LEC ~~of the component of the network~~ implanted in an access function.

12. (Currently amended) ~~[[A]] The routing method according to one of the claims 8 to 11 of claim 8~~, wherein the switched network is ~~[[using]]~~ an ATM type carrier network ~~[[and]]~~ with IP data packets.